**B.Sc. DEGREE EXAMINATION, NOVEMBER 2015.**

**II YEAR — III SEMESTER**

**Allied — STATISTICAL METHODS AND
ITS APPLICATIONS — I**

**Time : 3 hours Max. Marks : 60**

**SECTION A — (10 × 1 = 10 marks)**

**Answer any *TEN* questions.**

1. Define Statistics.
2. Define Tabulation.
3. What are two types of Arithmetic average?
4. State any two demerits of Median.
5. Define Dispersion.
6. State the formula for coefficient of variation.
7. Define an Event.
8. Two coins are tossed simultaneously. What is the probability of getting a head and a tail?
9. Write the MGF of binomial distribution.
10. Write any one characteristic of normal distribution.
11. State any two limitations of a diagram.
12. What are most commonly used graphs?

**SECTION B — (5 × 4 = 20 marks)**

**Answer any *FIVE* questions.**

1. What are the limitations of Statistics?
2. State the merits of Mode.
3. Tabulate the characteristics of Dispersion and skewness.
4. State and prove Addition theorem of probability.
5. State any prove any two properties of Moment generating function.
6. Calculate Range and coefficient of Range for the following data 27, 30, 35, 36, 38, 40, 43.
7. State the properties of Binomial distribution.

**SECTION C — (3 × 10 = 30 marks)**

**Answer any *THREE* questions.**

1. Explain types of classification.
2. State the merits and demerits of Arithmetic Mean.
3. Define standard deviation and write the mathematical properties of standard deviation.
4. State and prove Bay’s theorem.
5. Obtain mean and variance of poisson distribution.

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